

CLASSICAL SWINE FEVER  
FREE - ZONES IN MEXICO  
ADDITIONAL INFORMATION

México / august 1995



SUBSECRETARIA DE AGRICULTURA  
Y GANADERIA  
Dirección General de Salud Animal

**ADDITIONAL INFORMATION REQUESTED TO ASSESS THE STATUS OF CLASSICAL  
SWINE FEVER (CSF) IN THE STATES OF BAJA CALIFORNIA, BAJA CALIFORNIA SUR.  
CHIHUAHUA AND SINALOA.**

**FINANCIAL RESOURCES** (Please answer in \$ and % of total monies allocated for the CSF Control Program)

1.- What is the total budgetary allocation to the Federal Veterinary Services for the current and last two fiscal years?

A.

<b>Animal Health Budget 1993-1995</b>										
<b>Year</b>	<b>Animal Health</b>		<b>Livestock Under Delegation in the State</b>							
	<b>N\$</b>	<b>%</b>	<b>B.C.</b>		<b>B.C. Sur</b>		<b>Chihuahua</b>		<b>Sinaloa</b>	
			<b>N\$</b>	<b>%</b>	<b>N\$</b>		<b>N\$</b>	<b>%</b>	<b>N\$</b>	<b>%</b>
1993	59 906 700	100	241 600	0.4	136 500	0.22	60 400	0.1	377 100	0.62
1994	103 751 000	100	711 900	0.68	261 200	0.65	606 300	0.58	929 900	0.89
1995	85 907 000	100	531 200	0.61	562 500	0.25	2 848 000	3.31	1 586 000	1.84

The table below shows the amount allocated from the Livestock Under Delegation budget for the CSF campaign by state:

<b>CSF Campaign Budget by State 1993-1995</b>								
<b>Year</b>	<b>Baja California</b>		<b>B. California Sur</b>		<b>Chihuahua</b>		<b>Sinaloa</b>	
	<b>N\$</b>	<b>%</b>	<b>N\$</b>	<b>%</b>	<b>N\$</b>	<b>%</b>	<b>N\$</b>	<b>%</b>
1993	193 000	79.88	109 000	79.85	54 000	89.40	77 000	20.41
1994	569 000	79.92	208 000	79.63	485 000	79.99	187 000	20.10
1995	424 000	79.81	450 000	80.00	569 000	19.97	317 000	19.98

2.- What is the Federal budget allocated to the CSF program? How much of this budget goes to each state and how much stays in the central (Federal) level?

A.

<b>CSF Campaign Budget 1993-1995</b>		
<b>Year</b>	<b>N\$</b>	<b>%</b>
1993	227 100	100
1994	444 900	100
1995	2 500 000	100

This budget was used like support to the CSF campaign in all states regardless to the budget that the Livestock Under Delegation allocated to the CSF campaign for each state.

**3.- What is the swine industry's (state by state) contribution to the CSF program?**

A. - Baja California: The swine industry made no contributions to the CSF Campaign in the state. However, they have provided every assistance for the Campaign to be carried out and they support monitoring activities.

- Baja California Sur: The same as the above.

- Chihuahua: Industry and commerce contributed N\$30,000.00 and two mobile animal health inspection posts.

- Sinaloa: Swine producers contributed N\$35,000.00 to the CSF campaign in the state.

**4. What is the state's (Baja California, Baja California Sur, Chihuahua, and Sinaloa) contribution to the CSF program? How is the funding used?**

A. - Baja California: No contribution was made by the state government.

- Baja California Sur: No contribution was made by the state government.

- Chihuahua: The state government contributed:

1993 N\$1,199,650

1994 N\$1,349,606

1995 N\$1,499,563

This fund was used by the state government for operating expenses of control posts, and also to hire and train inspection personnel in quarantine stations.

- Sinaloa: The state government contributed the amount of N\$1,150,000 to the construction of the inspection posts in La Concha, La Concordia and El Carrizo.

## **II ACCREDITED VETERINARIANS AND OTHER AUTHORIZED PERSONNEL**

**1.- The 1993 number of veterinarians accredited to conduct CSF work was between 300-4300. Of this number, how many of these CSF accredited veterinarians are in Baja California, Baja California Sur, Chihuahua and Sinaloa?**

A. At present there are 344 veterinarians accredited to conduct Aujeszky Disease and Classic Swine Fever work.

- Baja California 0

- Baja California Sur 0

- Chihuahua 1

- Sinaloa 4

As can be seen, there are very few or no accredited veterinarians in the area because as these states are free of CSF there are no more eradication actions, which is the kind of work in which accredited veterinarians were involved. For that reason, veterinarians who were formerly accredited to conduct AS/VND actions no longer have the economic incentive to renew their accreditation.

**2.- How are these CSF accredited veterinarians compensated while performing CSF duties? Are funds paid from the Federal budget? State budget? Private industry? If Federal State and private industry all pay a proportion, what are these proportionate figures?**

A. Neither the Federal nor the state government compensate accredited veterinarians. The fees of accredited veterinarians are always paid by the individual or company that hires their services, and these are the swine producers and private industry. However, the Ministry of Agriculture, Livestock and Rural Development (SAGAR) is not involved in the area of paying fees for the services they render and such payment is decided by direct agreement between the swine farms or private industry and the accredited veterinarians.

**3.- Do these same accredited veterinarians also provide service to swine producers through their private practices?**

A. As a rule, CSF accredited veterinarians provide service to swine farms or companies in private industry where they also perform their accreditation activities.

**4.- a) What specific role do these CSF accredited veterinarians play in the CSF program?**

A. Accredited veterinarians are professionals recognized by the Ministry of Agriculture to carry out official animal health activities.

The specific animal health activities of veterinarians accredited for the National Classic Swine Fever Campaign are:

- Official vaccination to prevent and control the presence of CSF must be supervised and/or performed by an official or accredited veterinarian (3.3., Official Mexican Emergency Norm NOM-EM-012-ZOO-1994). It should be borne in mind that vaccination is not allowed in free and eradication zones.
- Distributors of CSF vaccine must have an accredited veterinarian, who will be in charge of keeping a record book noting the quantity and lot number of the vaccines stored; verify that thermograph readings were within a 2° to 4°C temperature range; and control the expiration date of batches, and the distribution of the biological product (6.2, Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
- The vaccination calendar to be followed by swine owners will be determined by the accredited veterinarian and shall be based on the geographical zone, the presentation of the disease and the type of biological product used (6.3, Official Mexican Emergency Norm, NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
- In rural swine production premises, vaccination certification should be endorsed by the seal and signature of the accredited veterinarian (6.4.2, Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
- Vaccination certification forms will be provided by the State Delegate's Office of the Agriculture Ministry, and shall be used by accredited or official veterinarians. These certification forms will be provided to the

vaccination personnel authorized by official or accredited veterinarians. Vaccination certificates should be filled by the person who applies the vaccine and signed by the official or accredited veterinarian (6.4.3. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign). It should be mentioned that accredited veterinarians supervise and coordinate the recruitment, training and education of technical personnel (vaccinators) required to carry out vaccination actions in their states.

- If CSF appears in a production unit in a zone in the control phase it will be necessary to vaccinate and/or revaccinate all the swine under the supervision of an official or accredited veterinarian (6.6. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
- Official or accredited veterinarians in the zone, swine producers, vaccinators and other persons directly involved should report any suspect case of CSF or red swine disease personally or by means of a telephone, telegraph or fax communication to the General Animal Health Department, the Ministry of Agriculture Delegate's Office in the state, the U.S.-Mexico Commission for the Prevention of Foot-and-Mouth Disease and Other Exotic Animal Diseases, the state authorities and local swine producer associations (7.1. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
- In order to prevent the potential spread of the CSF virus in zones where there is an outbreak, the people in places where swine are concentrated, such as farms, feeding pens or selling pens, should be well informed of the proper procedure for livestock movements and marketing. For this purpose, the official or accredited veterinarian should send the following in writing or fax to the General Animal Health Department and/or the appropriate Livestock Under-Delegate's Office: a list of all buyers, sellers, visitors and personnel employed at the place where the swine are located, and a list of vehicles in that place and that may be involved in an outbreak (7.2.1. Official Mexican Emergency Norm, NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
- The accredited veterinarian at the slaughterhouse shall verify that the swine for market have the vaccination and animal health certificates required for slaughter. If this requirement is not met, the accredited veterinarian at the slaughterhouse shall draw up an administrative record so that the violator may be penalized as called for by the Federal Animal Health Act (7.2.1. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
- Accredited veterinarians shall follow up any reports of suspect foci until final action is taken, and shall be responsible for receiving the report from the diagnosis laboratory, so that in coordination with Animal Health authorities they may carry out quarantine activities, control of movements, treatment, vaccination, disposal of dead or sick animals (burial or incineration); hygiene and disinfection of facilities where there was a CSF-positive focus. To this end the Norm provides the following:
  - In the case of outbreaks, veterinarians on the staff of the production units, official and accredited veterinarians, administrative and technical personnel and visitors should comply with all biosecurity measures described in the norm. The official or accredited veterinarian should inspect suspect pigs, perform autopsies and collect samples. Moreover, the veterinarian should report to the General Animal Health Department the suspicion of outbreaks and the data regarding the samples taken for diagnosis (10.1 and 10.2. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
  - Veterinarians in a quarantined zone should conduct daily inspections of all susceptible swine, and any suspect sign observed should be reported to the official or accredited veterinarian. Animals exhibiting suspect signs must be killed, an autopsy performed, and samples collected, to be taken to an accredited diagnosis

laboratory. (10.3.1. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994. National Classic Swine Fever Campaign).

- No pig may be killed if it comes from any area or production unit under control for an outbreak, except if an inspection has been carried out by an accredited veterinarian and the appropriate animal health certificate is issued (10.5.3. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994. National Classic Swine Fever Campaign).

- The official or accredited veterinarian will determine in what points to place signs such as *No Entry*, *Road Closed*, etc. (10.5.4. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994. National Classic Swine Fever Campaign)

- In order to prevent the spread of the CSF virus, cleaning and disinfection of pens, storerooms, clothes, utensils, vehicles and other items will be supervised by an accredited veterinarian. (10.6. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994. National Classic Swine Fever Campaign).

- For the movement of swine for market, or swine for breeding stock, feeding, fairs and shows from a free or eradication zone to a zone in the control phase, the official veterinarian of the Livestock Under-Delegate's Office, or an accredited veterinarian in the state of origin, should notify the Livestock Under-Delegate's Office in the state of destination in writing and by fax of the number of animals being moved, the number of the Animal Health Certificate, and the name and location of the slaughterhouse of destination; or the name and location of the premise, fair, or show of destination, in the case of swine for breeding stock, fattening fairs and shows. Official or accredited veterinarians in the state of destination shall verify that the seals on the shipments have not been tampered with or removed. They should also review the appropriate health documentation for the shipment. In addition, official and/or accredited veterinarians shall be responsible for supervising the arrival of swine shipments and shall take the appropriate animal health measures (11.1. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994. National Classic Swine Fever Campaign).

**b) What are their official duties and what are they authorized to do?**

**A.** Their official duties are described under Item 6 **Functions of Veterinarians accredited as Verification Units** of Official Mexican Norm NOM-018-ZOO-1994, Veterinarians Accredited as Verification Units Authorized to Provide Official Services in Animal Health Matters, as follows:

- To act in coordination with the Agriculture Ministry, whenever indicated, in order to provide the official services in animal health matters in the specialty area for which he/she has been accredited.
- To schedule and perform the actions for which they are authorized as veterinarians accredited as verification units, so as to provide official services in animal health matters.
- To report to the appropriate Under-Delegate's Office the date and location of the premise where they will perform animal health activities, according to the Official Mexican Norm in question, and which may be supervised by official personnel.
- When veterinarians accredited as verification units perform activities in states other than those for which they have been accredited they must notify the Under-Delegate's Office of their own state and the one they visit of the date and location of the premises where they will perform accreditation activities, as specified in the applicable Official Mexican Norm.

- To keep strict control of official documents, certification forms and Animal Health Certificates provided by the Agriculture Ministry for them to perform the duties assigned to them.
- To issue the official documents, certifications and Animal Health Certificates solely for the special area for which they are accredited.
- To endorse with their name, signature, seal and accreditation code the official documents and animal health certification forms issued, only for the special area of their accreditation. In the case of Animal Health Certificates, they should only sign and write the full name of the veterinarian accredited as a verification unit in the appropriate area.
- To forward to the Ministry of Agriculture (SAGAR) copies of the Animal Health Certificates and certification forms they may have issued.
- To oversee the proper application and use of products and official diagnostic tests of the special area for which they are accredited, using only biological, pharmaceutical and chemical products regulated by the Ministry of Agriculture and that meet applicable official Mexican norms.
- To assist the authorities in case of an animal health emergency in the implementation of prevention, control or eradication measures for whatever diseases or pests are determined by the Ministry of Agriculture.
- To inform the appropriate Under-Delegate's Office of their accreditation activities.
- To assist and provide additional information whenever required by the Ministry of Agriculture.
- To keep an orderly record of actions taken during the accreditation period.
- To advise producers about compliance with the Federal Animal Health Act and official Mexican norms.
- To continuously oversee compliance with the Federal Animal Health Act and official Mexican norms.
- To charge and collect a fee for services rendered.

Unofficial duties:

As indicated above, CSF-accredited veterinarians work in swine production premises or private industry companies connected with swine production, and perform their accreditation activities in those places.

### III SWINE IDENTIFICATION

#### 1.- Does Mexico have a National Swine Identification Program?

A. In order to consider that a state is in the control phase it should have a census of production units and their population. In order to be moved later to the eradication phase, the Ministry of Agriculture State Delegation should prepare a list of all swine premises in the state, with the following information: name of the premises, location, owner, type of operation, population for each stage, and their commercial flows (5. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign). However, there is no national swine identification system for individuals. Each swine producers union or association establishes a registration system as determined by its members.

#### 2.- Describe how breeding animals are identified and how animals in commerce can be traced back to their farm or origin?

A. There is a National Association of Pure Bred Swine Producers in Mexico, headquartered in Leon, Guanajuato, which establishes registries through documents issued for the pure bred swine belonging to members of the association.

They are also identified by the Animal Health Certificate, as according to Article 24 of the Federal Animal Health Act, such certificates should contain the following data:

- Name and address of the owner, possessor or importer.
- Place of origin and specific destination of the animals, their products and byproducts, or of the food, pharmaceutical, chemical and biological products for use with or consumption by animals, that are to be moved or imported, as well as their identification.
- Mention of the norm complied with.
- Date of issuance of the certificate, and
- Effective duration of the certificate.

Article 21 of the same Act specifies, among other things that: Freedom of movement is allowed in the nation's territory for animals, animal products and byproducts, and biological, chemical, pharmaceutical or food products to be used with or consumed by animals, except when the Ministry of Agriculture issues official norms that specify the cases in which movement and importation of any of the above require an Animal Health Certificate because of the zoosanitary risk involved.

Item 11 of the CSF Campaign norm lists the requirements for movement of swine, swine products and byproducts, and these invariably include the Animal Health Certificate. In this way, and based on the data on the Certificate, the origin of the herd can be traced.

Model Federal Inspection (TIF) slaughterhouses have a system that makes it possible to trace back animals if necessary. Each slaughterhouse has an official veterinarian that inspects animals before and after they are killed.

Each lot of animals is placed in a pen, and each individual is tattooed with the pen number. There is a pen-by-pen slaughter program. If any anomaly is found during inspection, the lot to which the animal belongs can be identified, and the premises of origin can be identified from the plant records.



#### IV VACCINATION

1.- Since vaccines are still widely used, what types of vaccines are used?

A. The only vaccines used in the campaign are the ones certified and authorized by the Ministry of Agriculture (6.1. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign), as follows:

TRADE NAME	VACCINE TYPE	STRAIN	COMPANY
Ingelvac	Modified live virus	Minnesota	Anchor S.A.
Clasivac plus	Modified live virus	GPE	Pronavive
Porcivac	Modified live virus	PAV 1	Quimica Hoechst
Colvasan	Modified live virus	PAV 250	Sanfer S.A.
Certivog	Modified live virus	China	Syntex S.A.
Certigen	Modified live virus	Minnesota	Syntex S.A.

2.- In control zones vaccination coverage is considered total. Does this coverage include all swine (backyard farms, small land holdings, as well as commercial operations)? What is the vaccination coverage of backyard herds?

A. Vaccination coverage in zones in the control phase should be carried out on the basis of high risk zones which have been identified as such. During the last three years the average coverage in the country has been 50%, and in some states it has been higher than 80% (Guanajuato, Michoacan and Jalisco). These percentages include rural and backyard swine production.

Vaccination certification is an indispensable requirement to obtain the Animal Health Certificate and be able to move the swine. In the case of swine for market, both the vaccination and Animal Health Certificates are required to permit slaughter of animals (6.4.4. Official Mexican Emergency Norm NOM-EM-12-ZOO-1994, National Classic Swine Fever Campaign).

3. Who distributes and authorizes the use of these vaccines? Who is authorized to administer it? How is the distribution of the vaccine monitored in order to prevent the unauthorized entry of vaccine into free and eradication zones?

A. The distribution of vaccines is monitored centrally by the CSF Division of the General Animal Health Department, through the monthly reports of vaccine sales sent by producer laboratories, indicating the volume and destination of their sales. In addition, the state level verifies that no biological products are found in drugstores and dealerships of veterinarian products in states that are free or in the eradication phase. This verification will be carried out by the Animal Health Program of the Livestock Delegate's Office in each state.

The CSF vaccine distributors and dealers must have an accredited veterinarian who will be in charge of keeping a record book, noting the quantity and lot number of the vaccines stored and verifying that the thermograph readings are within the temperature range specified by the Norm. He is also responsible for the expiration date of batches and control of the distribution of the vaccine (6.2, Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).

Vaccination certification forms shall be provided by the state Delegation of the Ministry of Agriculture and will be used by official or accredited veterinarians. These will be provided to the vaccinators authorized by the official or accredited veterinarians. The sequential numbers of the forms given to them should be recorded, as well as the quantity of vaccine they acquire. Vaccination certification forms shall be given by the vaccinator to the swine owner, and should be filled by the vaccinator and signed by an official or accredited veterinarian. The owner shall keep the original and the veterinarian shall keep a copy for his records, and for control, supervision and evaluation of the report (6.2 and 6.4.3, Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).

CSF vaccines should not be sold or used in zones that are free or in the eradication phase (6.7, Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).

## **V MONITORING AND INTERNAL CONTROL**

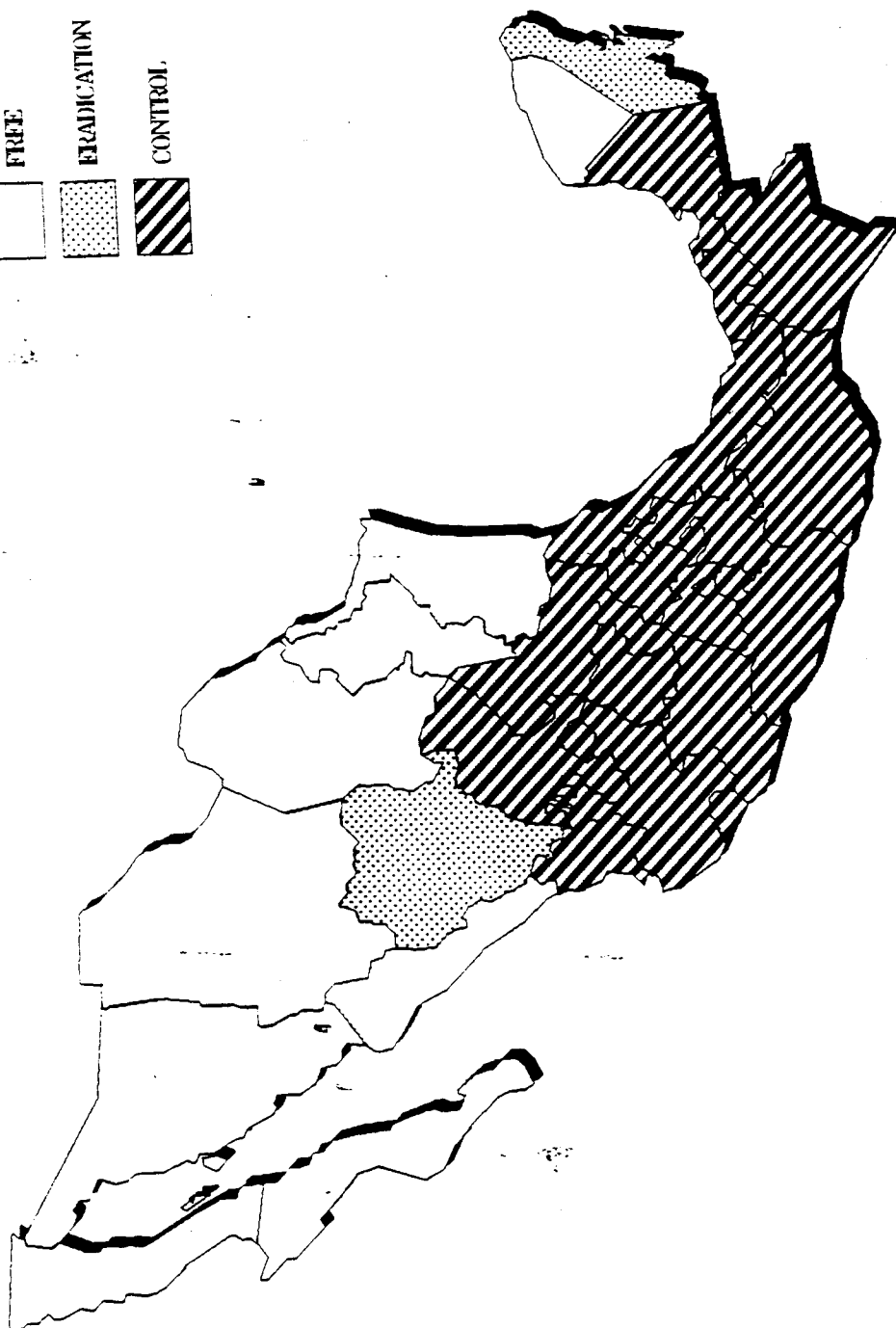
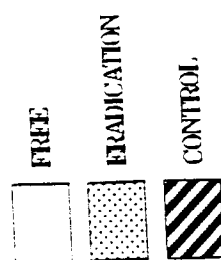
**1.- What safeguards have been implemented to ensure that CSF is not introduced into your "free states", particularly into such states as Sinaloa and Chihuahua, which border other states that are in the control phase of the program?**

A. At present the states that border Chihuahua are in the eradication phase (Durango), or free (Sonora, Sinaloa and Coahuila), while the state of Sinaloa is adjacent to free states (Sonora and Chihuahua), one state in the eradication phase (Durango), and to the south the state of Nayarit that is in the control phase. There is only one point of access from the state of Nayarit to Sinaloa, where the La Concha control post is located. This control post exercises strict control of movements of animals, animal products and byproducts, and of biological, chemical, pharmaceutical or food products for use with, or consumption by animals. It is located on Km 960 of Federal Road 15, on the boundary between the states of Sinaloa and Nayarit.

# CLASSICAL SWINE FEVER

## CURRENT SITUATION

### SITUATION



In general, the diseases covered by a campaign are subject to the animal health measures set forth in Article 12 of the Federal Animal Health Act, which specifies: Official norms may include the following animal health measures:

- education in animal health matters.
- the establishment, operation and verification of animal health assistance services.
- The control of movements of animals, animal products or byproducts and chemical, biological, pharmaceutical and food products for use with, or consumption by animals.
- The establishment of zoosanitary cordons.
- Seizure and disposal of animals, animal products and byproducts, biological, chemical, pharmaceutical and food products for use with, or consumption by animals, that might cause animal diseases or pests.
- Vaccination for protection and to prevent the spread of animal diseases.
- Quarantine and isolation.
- Diagnosis and identification of animal diseases and pests.
- Practices of sanitation, disinfection, disinfestation, sterilization, use of germicides and pesticides in animals, premises and vehicles, to prevent the transmission or infestation of animal diseases or pests.
- The killing of diseased or exposed animals.
- Cremation or burial of dead animals.
- Epizootiological research and surveillance.

In the specific case of CSF the following animal health measures have been taken:

- The protection of states, regions or zones that are free or in the eradication phase is effected through a strict control of movements of swine or of products and byproducts of swine origin (4.3. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).
- The introduction of swine from zones or states in the control phase into zones or states that are in the eradication phase or free of CSF is forbidden. (4.6. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classical Swine Fever Campaign).
- Also forbidden is the movement of swine, semen and embryos originating in a zone in the control or eradication phase and whose destination is a free zone (11.1 and 11.4, Official Mexican Emergency Norm NOM-EM-012-ZOO, 1994, National Classic Swine Fever Campaign).
- As specified in Item 11 of the Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign, movement of swine products and byproducts will be regulated throughout the nation's territory on the basis of the zones of origin and destination, as well as of the requirements indicated below:

**Origin:** Zone in free, eradication or control phase.

**Destination:** A zone in the control phase.

**Requirements:** Animal health certificate. In the case of zones in the control phase that are not adjacent and where the shipment must first travel through a free or eradication zone, the animals are to be shipped by non-stop flights. The above is applicable except when the companies of origin are Model Federal Inspection (TIF) organizations and are authorized by the General Animal Health Department to market swine products and

byproducts to zones in CSF-free or eradication zones, in which case the movement should take place in sealed vehicles.

**Origin:** Free. **Destination:** Free, eradication or control zone.

**Requirements:** Movement may take place freely, except if it is necessary to travel through a zone in the control phase and the destination is a free or eradication phase zone, in which case the movement should take place in sealed vehicles.

**Origin:** Zone in the control or eradication phase.

**Destination:** Free or eradication zone.

**Requirements:** Movement of products and byproducts should be carried out by TIF establishments that comply with the following requirements: to have a valid TIF registration, to have the express authorization of the General Animal Health Department, to market products and byproducts in CSF free and eradication zones. Transportation should take place in sealed vehicles. In order to prepare their products these companies should use raw material that originates or comes from CSF free countries or zones, or eradication or control phase zones, but from TIF slaughterhouses. The companies must comply with heat treatment requirements and the movement and identification procedures listed below:

- The products and byproducts of swine origin to be marketed in CSF free or eradication zones should be subject to the following heat treatment: 68.9°C for 30 minutes or 80.5°C for 3 minutes.

- After heat treatment, the plant's official veterinarian should supervise the packaging and storage of products by lots.

- To authorize movement of pork products and byproducts to CSF free or eradication zones, the official veterinarian shall issue the applicable Animal Health Certificate and shall verify that the trucks or vehicles that will transport the finished products are properly sealed when they leave the plant of origin.

- Upon arrival of pork products and byproducts shipments at their destination, Ministry of Agriculture official or authorized personnel assigned to the check points at the entry to the state will strictly carry out the following procedure: review the Animal Health Certificate, check that the seals have not been removed, remove the seals, and inspect the shipment to certify that it matches the data on the Animal Health Certificate.

- Any product and byproduct shipments that have to travel through CSF free or eradication states in order to get to the final destination, Ministry of Agriculture official or authorized personnel assigned to the checkpoints at the entry and exit of the various states will only review the Animal Health Certificate for the shipment, and shall place on the back of that document the seal and signature of the inspector and shall certify that the vehicle's seals have not been removed, permitting the vehicle to continue its trip freely.

- With the purpose of facilitating the identification and inspection of the lots of finished products and byproducts to be moved to CSF free and eradication zones, they should bear an identification label with the following wording: *TIF Establishment No. . Products authorized for marketing in Classic Swine Fever-free or eradication zones.* This label should be placed on the packages and wrapping of each product, which should meet the technical specifications of the norm (11 of Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).

- Swine that is to be imported should originate in and come from countries free of CSF, and should have a health certificate issued by an official veterinarian of the country of origin. When the animals arrive at the farm or premise they must be quarantined for 30 days (13.1 and 13.2, Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).

- Pork products and byproducts for importation into Mexico should come from a TIF plant authorized by the Ministry of Agriculture and should originate in or come from CSF free countries (13.3. Official Mexican Emergency Norm NOM-EM-012-ZOO, 1994, National Classic Swine Fever Campaign).

In addition to the specific zoosanitary measures applied for CSF control, Mexico has established the National Agricultural Quarantine System with the purpose of having an integrated institutional and strategic basis for implementation of quarantine services, for the protection of the country's agricultural, forest and livestock resources. These services focus on preventing the introduction of exotic pests and diseases, and are designed to contribute to the control and eradication of any disease that may emerge, to support phytozoosanitary campaigns at the national level, and to maintain zones free of phytozoosanitary pests and diseases.

The Agricultural Quarantine System is made up of the External and Internal Quarantine. The External Quarantine includes all activities directed to preventing the introduction of diseases into the country, while the Internal Quarantine is responsible for activities intended to prevent the spread of diseases in the nation's territory from affected areas to free areas.

Internal quarantine.- One of the most important elements for the success of phytozoosanitary campaigns is the implementation of effective quarantine control through the establishment of internal check points (quarantine stations and posts) along the country's main roads, where the agricultural products and the animals to be moved will be inspected. The posts will also verify that official norms are complied, so as to guarantee that such movements involve no phytozoosanitary risks.

The inspection posts that monitor the entry and exit of animals, and animal products and byproducts in the states in question are the following:

<b>BAJA CALIFORNIA</b>	
<b>Name</b>	<b>Location</b>
Agricultural Post San Luis	Km 65, M. Alemán-San Luis R.C. Road
Agricultural Post Km 57	Km 57, Nueva Mexicali-San Luis Road
Agricultural Post San Felipe	Km 1, Sn. Felipe Entronque Unión-Mexicali
Agricultural Post Santo Tomas	Km 54, San Vicente-Santo Tomas Rd.
Agricultural Post San Quintin	Km 188.5, Ensenada-San Joaquin Rd.
Agricultural Post Parallel 28	Transpeninsula Rd, Parallel 28
<b>BAJA CALIFORNIA SUR</b>	
Puerto Pichilingue Post	17 km from La Paz
<b>CHIHUAHUA</b>	
Escalón	Km 74, Jimenez-Torreón, Coah. Rd.
Los Charcos	Km 34, Parral-Durango Rd
La Casita	Km 3.2, Parral-Gpe. y Calvo, Chih. Rd.
Jimenez	Km 6, Jimenez-Savalza Rd.
<b>SINALOA</b>	
Concordia	Km 44, Mazatlan, Sin., Durango, Dgo. Rd.
La Concha	Km 960, Fed. Rd. 15, Nayarit-Sinaloa
El Carrizo	Sinaloa-Sonora boundary, on Fed. Rd. 15

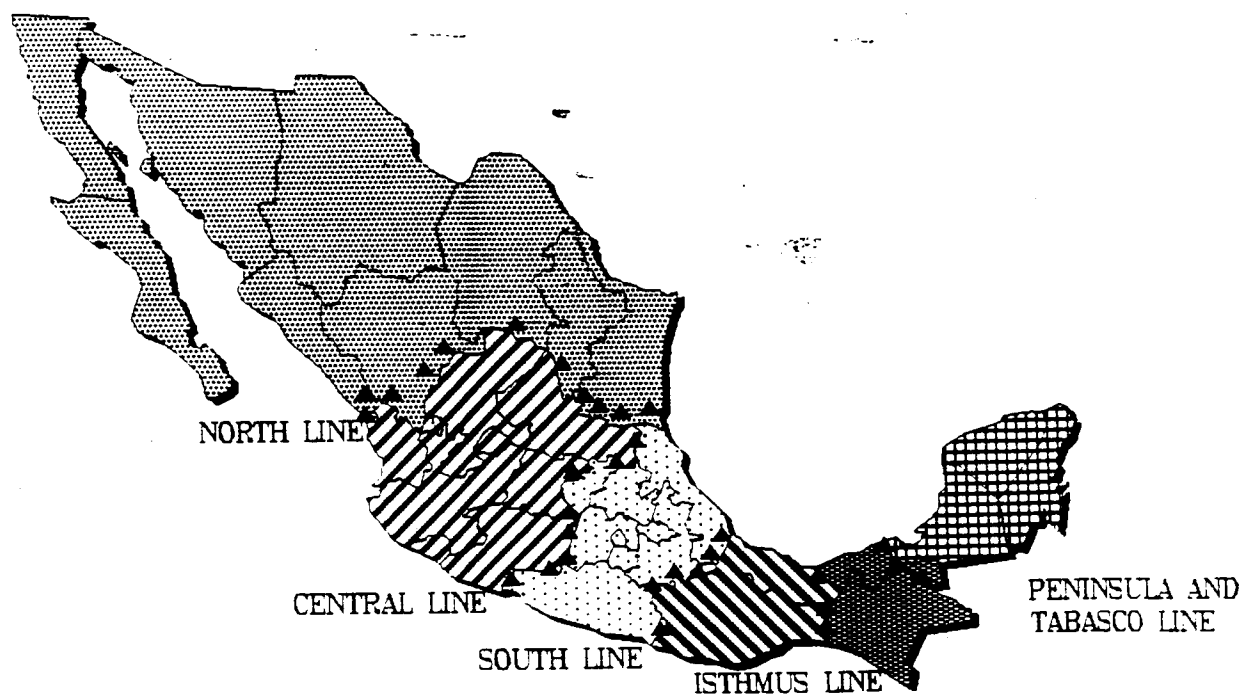
Additionally, the states of Chihuahua and Sinaloa have the dipping facilities listed below, which in the case of animal health emergencies may serve as control posts:

CHIHUAHUA	
Name	Location
Dolores	Dolores-Gpe. y Calvo. Chih. Rd.
Morelos	Población Morelos. Chih.
Tohayana	Población Tohayana. Gpe. y Calvo
Bahuichivo	Bahuichivo. Urique. Chih.
Temoris	Temoris. Guazapares Municipality
Chinipas	Chinipas. Chih.
SINALOA	
El Fuerte	Km 88. Mochis-Choix St. Rd.
Est. Naranjo	5 km from Estación Naranjo
Sinaloa de Leyva	Guasave-Sinaloa de Leyva St. Rd.

In addition to the above and in order to optimize the use of resources and direct them to a reliable on-going internal quarantine system with adequate inspection capability and greater protection for disease-free regions, a project was undertaken based on the creation of regional quarantine cordons.

These cordons are made up of 46 facilities - quarantine stations and posts - located around regions that comprise several states with similar phytozoosanitary characteristics, and which because of their geographical location, communication systems and plant and livestock traffic, apply appropriate controls for the movement of plants, animals, and agricultural products and byproducts.

## QUARANTINE INFRASTRUCTURE



The quarantine cordon that protects Sinaloa and Durango in the north of Mexico is the Northern Region Quarantine Cordon, made up of the following inspection posts:

NORTH REGION QUARANTINE CORDON	
Name	Location
La Concha	Km 960, Fed. Rd. 15, Nayarit-Sinaloa boundary
Concordia	Km 44, Fed. Rd. 40, Mazatlán-Durango
Coyotes	Km 96, Inter-Ocean Rd.
Vicente Guerrero	Fed. Rd. 45, Durango-Fresnillo, Zac.
Santa Clara	Fed. Rd. 49, Cuéncame-Durango-Fresnillo, Zac.
Tanque Escondido	Fed. Rd. 45 Saltillo-Zacatecas-Coahuila
San Roberto	Matehuala-Salttillo-Monterrey Rd.
Post No. 21 (Tula)	Rd. 101, Victoria-San Luis Potosi
Antiguo Morelos	Km 3.5, Rd. 85, Antiguo Morelos-Mante
Post No. 30 (Rayón)	St. Rd. Manuel-Ebano, S.L.P.
Altamira	Km 24.5, Rd. 180, Tampico-Manuel

It is important that when a state enters a CSF eradication phase, the Quarantine Control Department notify airlines so that they will discontinue menus that contain pork in their flights to airports in free states. For example:

Canadian bacon	is substituted by :	Smoked turkey
Pork sausage	"	Turkey sausage
Ham	"	Sliced turkey

External quarantine - This type of quarantine is also considered the first line of sanitary defense and its objective is to take preventive measures designed to prevent the introduction of diseases and pests into the country. In order to do so, in ports, airports and borders compliance with phytozoosanitary norms and requirements applicable to the importation of animals, vegetables, and agricultural products and byproducts will be verified.

All the states have their own phytozoosanitary inspection offices to control movements in borders, airports and ports, which in the state of Chihuahua are the following:



**PHYTOZOOSANITARY INSPECTION OFFICES  
BORDERS, AIRPORTS AND PORTS**

<b>BAJA CALIFORNIA</b>			
<b>Inspection Agency</b>	<b>Border</b>	<b>Airport</b>	<b>Port</b>
Tecate		*	
Tijuana	*	*	
Mexicali (1)	*	*	
Algodones	*		
Ensenada			*
<b>BAJA CALIFORNIA SUR</b>			
La Paz (1)		*	*
San Carlos			*
Santa Rosalia			*
San Jose del Cabo		*	
Cabo San Lucas			*
<b>CHIHUAHUA</b>			
Cd. Juarez (1)	*	*	
Palomas	*		
Ojinaga	*		
Chihuahua		*	
<b>SINALOA</b>			
Mazatlan		*	*
Topolobampo		*	*
Guaymas			*
Culiacan		*	

(1) Central inspection agency that provides inspection services for nearby places with a lower importation volume.

2.- How many permits were issued in 1993 and 1994 for the authorization of movement of swine from Sinaloa and Chihuahua to other states? Who issued these permits?

A. For Sinaloa:

	<b>Year</b>	<b>Quantity</b>
	1993	539
	1994	729
Jan-June	1995	173
	<b>Total</b>	<b>1411</b>

Chihuahua: To date no Animal Health Certificate for the movement of swine to other states in the country.

Animal Health Certificates are issued at the federal and local levels:

- At the federal level - the Animal Health Certificate is an official document issued by official Ministry of Agriculture veterinarians. (SAGAR) The Ministry of Agriculture agencies that issue animal health certificates

are the Under-Delegate Offices for Livestock, Rural Development Districts, Rural Development Support Centers, Model Federal Inspection plants (TIF), and the phytozoosanitary inspection office at the Mexico City International Airport.

At the local level, the Ministry of Agriculture, through the General Animal Health Department, accredits veterinarians as certification units for control of movements, and through agreements with the National Livestock Certification Organization, it also accredits certification organizations. These are the local livestock producers' association. Through regional livestock producer unions, the National Livestock Certification Organization distributes Animal Health Certificate forms to the 734 accredited Certification Centers.

In the case of animal movements, the Animal Health Certificate must always be signed by a Ministry of Agriculture veterinarian or an accredited veterinarian.

## VI LABORATORY SUPPORT AND SURVEILLANCE

1.- What laboratories are authorized to conduct testing for CSF? Which laboratories are currently testing samples for CSF? Where are they located?

A. In order to implement surveillance programs there are national reference laboratories. These are the National Animal Health Diagnosis Center (CENASA) in Tecamac, in the state of Mexico, and the laboratory of the U.S.-Mexico Commission for Prevention of Foot-and-Mouth Disease and other Exotic Animal Diseases (CPA) in the Federal District.

The following laboratories have also been accredited for CSF diagnosis:

LABORATORY	LOCATION
Laboratorio Cordobes	Veracruz
Lab. Central Regional de Mérida	Yucatan
Lab. Central Regional de Monterrey	Nuevo Leon
Lab. de Diagnostico Especializado	Guanajuato
Lab. Central Regional de Tlaquepaque	Jalisco
Lab. de Diagnostico Especializado	Michoacán
Universidad Autónoma de Tamaulipas	Tamaulipas
Lab. de Diagnostico Especializado	Puebla

2.- a) What private laboratories are authorized to receive samples for CSF diagnosis?

A. The laboratories listed above.

**b) How are they certified?**

A. The accreditation procedure for a laboratory is as follows: The laboratory requests and fills an accreditation form and attaches the documentation requested. This application is forwarded to the appropriate Under-Delegate's Office for Livestock, which sends the request to the General Animal Health Department (DGSA) where the application is analyzed. If found to be appropriate the evaluation committee is notified. The committee will review the documents and designate an inspector to conduct a preliminary visit.

In the case of an official laboratory, the inspector will agree on the date for the preliminary visit with the laboratory. If it is not official, the Inter-American Agricultural Cooperation Institute (IICA) is notified so that it may charge the laboratory a fee for the preliminary visit. The IICA will give the laboratory a receipt with a copy for DGSA and another for the inspector, who will then schedule a visit in agreement with the laboratory. The DGSA and the Under-Delegate's Office will be informed of the date of the visit.

Personnel from the Under-Delegate's Office will take the inspector to the laboratory to conduct the preliminary visit. The inspector will instruct the person in charge of the laboratory as to the accreditation procedure. A thorough presentation is given of what the actual inspection visit will consist of, and a copy is given of NOM-003-Zoo-1994, Criteria for the Operation of Animal Health Accredited Laboratories. The inspector shall notify the Evaluation Committee that the preliminary visit has been effected.

The Laboratory will then ask the DGSA for an evaluation visit, sending a copy to the Under-Delegate's Office. The DGSA shall notify the evaluation committee of the request, which it then reviews, and an evaluator is appointed.

In the case of an official laboratory, the evaluator will examine the documentation and will schedule an evaluation visit with the agreement of the laboratory. If the laboratory is not official, IICA is notified in order to charge the laboratory a fee for the evaluation visit. IICA will receive the payment and present the laboratory with a receipt, sending a copy to DGSA and the evaluator, who will examine the documentation and schedule the evaluation visit with the agreement of the laboratory. The DGSA and the Under-Delegate's Office will be informed of the date of the evaluation.

Personnel for the Under-Delegate's Office will take the evaluator to the laboratory to conduct the visit. The evaluator will complete the visit, fill the evaluation guide, prepare the general results and present this to the Evaluation Committee. The Committee will receive the documentation and analyze the results.

The Committee will make its decision and inform DGSA. If they find that accreditation is in order, DGSA will prepare an authorization of accreditation, and will send the accreditation documents and a report of activities to the laboratory, which can then begin to provide accreditation services. DGSA will send a copy of the accreditation to the Under-Delegate's Office.

If accreditation is not found to be in order, the Under-Delegate's Office and the laboratory are informed, and the laboratory will be given 180 calendar days in which to implement recommendations.

The Laboratory will then inform the Under-Delegate's Office that the recommendations have been implemented. The Under-Delegate's Office will supervise this implementation and will inform the DGSA, which in turn will notify the Evaluation Committee, which will again make a decision and inform the DGSA.

**c) What is the notification system for reporting and/or confirming results to the national reference laboratory?**

A. Notification of suspect cases or forwarding of samples is done personally, or by telephone, telegraph or fax communication to the General Animal Health Department, the State Delegate's Office of the Ministry of Agriculture, the U.S.-Mexico Commission for the Prevention of Foot-and-Mouth Disease and other Exotic Animal Diseases, the state authorities or the local Livestock Producers Associations (7. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).

It is the responsibility of accredited veterinarians and/or those responsible for premises, certification organizations, verification units, laboratories, owners and managers to notify the Ministry of Agriculture whenever they learn of the presence of a notifiable disease or pest (Art. 43, Animal Health Act).

As indicated below, unaccredited laboratories forward their samples directly to CENASA (the National Animal Health Diagnostic Center).

In addition, Mexico has put in place a system of exotic disease surveillance based on the United States-Mexico Commission for the Prevention of Foot-and-Mouth Disease and other Exotic Animal Diseases (CPA).

In order to carry out epizootiological surveillance activities, and respond to any suspicion of exotic diseases, as well as to provide training and public information, the CPA has 8 regional coordinators and 20 zone coordinators strategically located throughout the country. In this way a continuous presence is maintained emphasizing the second line of defense: early detection of problems.

It is important to mention that in a free state, classical swine fever is considered an exotic disease.

**3.- What procedures exist to ensure that laboratories without the capability to diagnose CSF report and forward suspect samples to an authorized reference laboratory?**

A. Unaccredited laboratories forward their samples directly to CENASA in Santa Ana Tecamac. By rule, the suspicion of the presence of this disease should be notified to the General Animal Health Department.

**4.- What is the source of the reagents used for the serological testing of CSF?**

A. There are three official CSF diagnostic techniques: ELISA, immunoperoxidase, and optionally, in the case of an outbreak, immunofluorescence.

The conjugate used for immunofluorescence CSF diagnosis is produced and sold by the National Forestry and Agricultural Research Institute.

Immunoperoxidase plates are marketed by the National Veterinary Medicine Biological Products Company.

ELISA plates are sold by companies engaged in the sale of such products, which are imported from Europe.

**5. What type of specimens are routinely submitted for diagnosis?**

A. In free or eradication zones. - Immunoenzymatic assays (ELISA) and immunoperoxidase techniques to detect CSF virus antibody utilize blood serum samples. These tests are used for epizootiological monitoring.

In zones in the control phase, or to diagnose suspect cases of outbreaks - the diagnosis should be based on the preliminary phase of immunofluorescence tests on tonsils. The final or confirmation diagnosis shall be based on identification of the viral antigen by means of direct or indirect immunofluorescence tests of tonsils, spleen and lymph nodes for the first test, and tonsils, spleen, lymph nodes and kidney for the second (7.3 and 8. Official Mexican Emergency Norm NOM-EM-012-ZOO-1994, National Classic Swine Fever Campaign).

**6. Excluding samples collected during the scheduled annual surveys, how many samples were tested for CSF by all laboratories in 1992, 1993 and 1994?**

A. In 1994, when the laboratory accreditation program began, 4972 samples were sent for a CSF diagnosis.

CENASA received the following:

YEAR	DISEASE	SUSPECT SAMPLES
1992	Classic Swine Fever	856
1993	Classic Swine Fever	650
1994	Classic Swine Fever	666

The U.S.-Mexico Commission for the prevention of Foot-and-Mouth Disease and Other Exotic Animal Diseases (CPA) received

YEAR	DISEASE	SUSPECT	POSITIVE FOCI AND LOCATION
1992	CSF	23	1 (1 Guerrero)
1993	CSF	172	3 (1 BCS, 1 DF, 1 Sin)
1994	CSF	29	6 (1 BCS, 3 Cis, 2 Q Roo)
07/1995	CSF	15	2 (1 EdoMex, 1 Campeche)

**7.- Does routine surveillance (sampling) at slaughtering establishments exist? Are these TIF or municipal plants? What samples are collected? Who collects the samples? How many samples were submitted from each of your free states?**

A. Baja California - There is routine surveillance in slaughter-houses. In 1994, 483 samples were collected in municipal and TIF slaughterhouses by personnel of the Livestock Under-Delegate's Office and animal health veterinarians from municipal abattoirs, who report any suspect cases. When this happens personnel from the State Emergency Animal Health Group (GEESA) go to investigate. Any suspect sample is forwarded to CENASA.

Baja California Sur - Routine surveillance systems are in place in the La Paz municipal abattoir, where swine from the municipalities of La Paz and Comondú are slaughtered. They make up 88% of the state stock. Blood

samples are routinely collected to obtain blood sera. Samples are collected by personnel of the Livestock Under-Delegate's Office and the following number of sera have been sent to CENASA:

1993	281 samples
1994	751 samples
1995	574 samples

Sinaloa - Surveillance to detect evidence of CSF is carried out in the main municipal slaughterhouses (Mochis, Guamuchil, Culiacan and Mazatlán), and in a TIF slaughterhouse (FAPSA), where sera are collected and animals are inspected before and after slaughter by the veterinarian in the slaughterhouse. The samples sent for CSF diagnosis were the following:

1993	4,230 samples
1994	930 samples

Chihuahua - Routine monitoring is carried out in municipal abattoirs, and the Animal Health Inspectors on their staff collect the sera of the swine killed.

## VII SCHEDULED SURVEYS AND SAMPLING

- 1.- What is the sampling methodology?
- 2.- In your surveys for Baja California, Baja California Sur, Chihuahua and Sinaloa, how many farms were sampled in each state? How many of these farms were commercial operations, and how many were backyard farms?
- 3.- How were the farms used in the survey selected?
- 4.- What type of animal was sampled? (that is, feeder pigs, breeding animals, market pigs, etc.)?
- 5.- How many animals were sampled from each of the selected farms? How was the sample size determined?
- 6.- Are the results from the October/November 1994 survey available?

A.- A permanent monitoring program was launched in May, 1995 in the state of Sonora in state and Model Federal Inspection (TIF) abattoirs in order to determine the absence of CSF virus antibodies, with a 95% level of confidence and 0.1% of expected prevalence.

The sampling methodology for each state was described in the documents entitled *Characterization of the State of (Baja California, Baja California Sur, Chihuahua or Sinaloa) for International Recognition as a CSF Free Zone*, delivered during the Trilateral Animal Health Meeting held in Zacatecas, Mexico, in June, 1994.

In addition, in the second half of 1995 a monitoring will be implemented in the states of Baja California, Baja California Sur, Chihuahua and Sinaloa. The results will be presented as soon as possible.

## VIII COMPLIANCE AND LEGAL RECOURSE

1.- What regulatory enforcement authority exists to ensure that the CSF program norms and regulations are followed? What legal recourse is available to prosecute violators, and what office has the authority to take such disciplinary action?

A. The applicable legislation for the enforcement of Official Mexican Norms is the Federal Animal Health Act, which in Title Four contains a chapter on Violations and Penalties, and in Article 54, Section I, it specifies that failure to follow official norms provided for by the Act are administrative violations and subject to a fine of one hundred to fifteen thousand salaries, understanding by salary, the general minimum wage in effect in the Federal District at the time the violation takes place.

Title Three, Chapter II of the Act refers to verification and specified that the Ministry of Agriculture may verify at any time and place the observance of official norms called for by law, like the official norms that provide for the Animal Health Campaigns.

Verification may also be done by the Accredited Verification Units, but only at the request of the party involved.

Verification is the action directed to fully checking into observance of all provisions contained in the official norms, for which a Verification Visit Order is issued, which should contain an autograph signature, issued by the competent authority, specifying the place or the zone that is to be checked, the purpose of the visit, its scope and the legal provisions on which it is based.

A detailed record will be made of the verification visit in the presence of two witness, and the record will contain the following:

- Name of the party visited.

- Address where the visit was made.

- Time, day, month and year of beginning and conclusion of the visit.

- Date and number of the official letter calling for the visit.

- Name and position of the person who made the visit.

- Name and position of the witnesses.

- Information about the visit.

- Statements by the party visited, if any.

- Name and signature of the persons involved in the visit, including those who effected the inspection. The record's validity shall not be affected by the refusal of the party visited or their legal representative to sign, and the inspector should indicate the reason for such refusal.

When a norm is violated, the authority that will impose the applicable penalty should first notify the violator that the procedure has begun, so that he may have 15 days in which to make whatever statements and produce whatever evidence is deemed advisable.

After hearing the violator and examining the evidence presented and admitted, the decision will be put in writing within the next ten days, and will be delivered personally or by registered mail.

Penalties for violations will be imposed in addition to whatever penalty is applicable for penal offenses that may have been committed by the violators.

As specified in Article 3 of the Federal Animal Health Act, this law is to be enforced by the Federal Executive branch of government through the Ministry of Agriculture.

**2.- How many alleged violations were recorded by state during 1993 and 1994? How were these alleged violations settled?**

A. In Baja California.- There is no record of violations of the CSF norm.

In Baja California Sur.- Animal health inspection points have detected pork products intended for entry into the state coming from zones in the control phase, as follows:

Year	Records	Product Quantity
1993	252	426.4 k
1994	228	1,100.6 k
1995 (June)	76	478.2 k

All these products were seized and incinerated.

In Chihuahua, pork products are detected by routine inspection at traffic control posts and the international phytozoosanitary inspection offices, and they are seized and incinerated.

In Sinaloa the following attempts were made:

Year	Attempts
1993	96
1994	60

These incidents were settled by returning the products to the place of origin in the case of large quantities. In the case of small amounts they were seized and incinerated. In October 1993 serological evidence of CSF was found in a farm in Sinaloa. An epidemiological investigation was carried out and it was found that the presence of antibodies was due to the clandestine application of the CSF vaccine. The matter was referred to the legal area of the State Delegation of the Ministry of Agriculture and the appropriate penalty was applied to the party responsible.